

REMARKS

After amendment , claims 2-16 remain pending in the application, claim 1 having been cancelled. The amendment to the claims has been made to address the Examiner's rejection of the claims over the disclosure of Mitchell, which relates to a method of treating containerized foods. The present invention has been amended to relate to the processing of an animal carcass or sections of the carcass. Support for the amendment to the claims can be found throughout the originally filed specification and claims and in particular, at page 5, fourth and fifth full paragraphs (especially the first two lines of the fourth paragraph), the top of page 6 and page 8, first full paragraph. No new matter has been added by way of this amendment.

The Examiner has rejected the original claims variously under 35 U.S.C. §102 and §103 for the reasons which are set forth in the December 1, 2004 office action. Applicant have amended the claims and traverse all of the rejections for the reasons which are detailed hereinbelow in the relevant sections.

The Rejection of Claims 1,2,5,8 and 14 as being Anticipated by Mitchell

The Examiner has rejected original claims 1, 2, 5, 8 and 14 as being anticipated by Mitchell, U.S. patent no. 6,210,730 ("Mitchell") for the reasons which are stated in the office action on page 2. The present invention relates to a method of reducing the discoloration of meat during the processing of a meat carcass which has been disinfected with an oxidizing disinfectant, followed by exposing the disinfected carcass to an aqueous reducing agent to reducing discoloration. The present invention is not anticipated by Mitchell.

Mitchell discloses a method for treating containerized foods, not meat carcasses which are being processed at a meat plant as in the present invention. In Mitchell, a perishable meat product to be shipped to a retail shop is first exposed within a sealed container to a chilled gas mixture comprising an inert gas, which is subsequently replaced with a high-oxygen gas mixture. The Mitchell process is said to maintain freshness of the packaged processed meat. Inasmuch as the present invention is directed to a method which is performed in order to provide processed meat from a meat carcass, the present method is not anticipated by Mitchell. Mitchell clearly failed to appreciate the present invention inasmuch as the processing of meat requires disinfection of the carcass in order to avoid microbial, particularly bacterial contamination of the final processed meat. Mitchell is directed to a method of treating already processed meat, an approach which would fail to address bacterial contamination at a meat processing plant. Thus, the inventor of the present application recognized that the processing of a meat carcass would be

favorably treated with an oxidizing disinfectant to reduce contamination of the carcass, followed by a reducing agent, which would reduce discoloration caused by the disinfectant. Mitchell clearly does not disclose the present invention and the present invention is novel over Mitchell.

The Rejection of Claims 1,2,5,7 9 and 14 as being Anticipated by Fujita

The Examiner has rejected original claims 1, 2, 5, 7, 9 and 14 as being anticipated by Fujita, et al., JP 61104773A ("Fujita"). Applicant respectfully asserts that the instant amendment obviates any possible contention that Fujita anticipates the present invention.

As set forth above, the present invention relates to a method of reducing the discoloration of meat during the processing of an animal carcass or carcass sections, the method comprising applying to the animal carcass or carcass sections a composition comprising an oxidizing germicide to disinfect the animal tissue, and after disinfection of the tissue, applying an aqueous solution comprising a reducing agent to the disinfected tissue wherein application of the aqueous solution to the disinfected carcass tissue reduces meat discoloration caused by the oxidizing germicide. Contrary to the Examiner's contention, Fujita does not anticipate the present invention.

Fujita primarily relates to the a method for reducing the chlorine smell from the use of an aqueous chlorine sterilizer on vegetables, fresh fishes and meat by first treating the vegetables with an aqueous chlorine sterilizer and then an aqueous sulfite salt or other compound. Fujita does not disclose the use of the method in a meat processing method, nor does Fujita indicate that food discoloration is even an issue. Fujita instead is directed to a method for reducing the chlorine smell which occurs when an aqueous chlorine sterilizer is used to sterilize food.

The present invention is clearly not anticipated by the method of Fujita because Fujita does not disclose the use of the method on a meat carcass prior to processing, which, in the present invention combines the benefit of reducing bacterial contamination of meat which ultimately emerges from the processing of the carcass as well as reducing the discoloration of meat which occurs as a consequence of the use of an oxidizing germicide. Fujita neither discloses the use of the disclosed method on a meat carcass, nor does it disclose the method for use to reduce discoloration of the treated food. Fujita clearly failed to recognize this aspect of the present invention inasmuch as Fujita suggest that the primary aspect of the present invention relates to the disinfectant method on fruits and vegetables. Moreover, the Fujita method is directed to disinfection much closer to the retail sale, inasmuch as a chlorine smell would be

important to a final consumer, but would be irrelevant in a meat processing plant. Thus, Fujita clearly does not anticipate the present invention.

The §103 Rejection

The Examiner has rejected claims 3, 4, 6, 10-13 and 15 under 35 U.S.C. §103 as being unpatentable over Fujita, described above, as applied to claim 1 above, in view of Kross, U.S. patent no. 5,389,390 for the reasons which are stated in the office action on pages 4-5.

Essentially, it is the Examiner's position that Fujita discloses the method of original claim 1 and Kross discloses a method of treating meat with an oxidizing germicide with minimal discoloration with specific components and steps of the present invention as claimed. Applicant respectfully traverses the Examiner's rejection.

The present invention, described above, is cited here. In essence, the present invention is directed to the treatment of animal carcasses during processing by treating the carcass with an oxidizing germicide to disinfect the carcass and thereafter, treating the oxidized/disinfected carcass with a reducing agent to minimize discoloration. As discussed below, a combination of Fujita and Kross does not render the present invention obvious.

For the reasons stated hereinabove, Fujita does not disclose or suggest the present invention because Fujita is directed to a method of reducing the smell of chlorine from a food source, which could be vegetables, fruit, fish or meat after treatment with an aqueous chlorine sterilizer. It is apparent from Fujita that Fujita's method is designed to disinfect a food at a retail source or just prior to a retail source because the method is directed to minimizing a chlorine smell from the use of an aqueous chlorine sterilizer. Fujita is decidedly not directed to a method for treating an animal carcass prior to meat processing in order to disinfect the carcass to minimize bacteria which may exist and is high risk at the start of that process, followed by exposing the disinfected meat carcass to a reducing agent in order to minimize discoloration.

Kross actually teaches away from the present invention inasmuch as Kross is directed to solving the same problem of the present invention by avoiding or minimizing an oxidizing germicide in treating an animal carcass, in Kross's case chlorine dioxide, and instead relies on

eliminating the chlorine dioxide by using chlorous acid as the germicide instead. Kross does not even discuss the use of a first oxidizing germicide step, except in the context of its being avoided. Thus, Kross does not in any way recognize or try to solve the present problem, but instead is directed to teachings which avoid the problem. Thus, Kross teaches away from the present invention because Kross teaches to avoid/minimize chlorine dioxide (an oxidizing germicide) and instead makes use of chlorous acid as the disinfectant composition.

As discussed above, Fujita does not disclose or suggest the present invention because Fujita discloses simply reducing or eliminating the chlorine smell. Fujita says absolutely nothing about discoloration. This is particularly true given that Fujita suggests as its primary objective the treatment of vegetables and fruit, not meat. In Kross, the objective is to minimize discoloration which occurs from oxidation of hemoglobin in meat, an objective which is met by essentially eliminating oxidation. Kross failed to recognize that discoloration could be reduced and/or eliminated by using a second step which comprises exposing the meat carcass disinfected with an oxidizing germicide to a reducing agent, which prevents discoloration and in many cases, actually reverses oxidation of hemoglobin, which occurs during the first oxidizing germicide step. Thus, the present invention makes use of highly effective oxidizing disinfectants in the treatment of carcasses prior to meat processing by relying on a second step which reduces and/or eliminates any potential deleterious effect the oxidizing germicide might have on the carcass. The final processed meat is organoleptically superior and is clean and sterile. Thus, the present invention represents a clear advance in the art.

Fujita and Kross cannot be combined in any way to produce the present invention inasmuch as Fujita failed to recognize meat discoloration as a problem during the processing of an animal carcass and Kross teaches away from utilizing a reducing agent with an oxidizing germicide and instead simply teaches to avoid, as much as possible, the use of the oxidizing germicide. These teachings, when combined, clearly do not result in the present invention. Consequently, the present invention is patentable over the teachings of Fujita in view of Kross.

For all of the above reasons, it is respectfully submitted that the present application is now in condition for allowance and such action is earnestly solicited. One independent claim

has been cancelled (claim 1) and one independent claim has been added (claim 16). No fee is due for the presentation of this amendment. The Commissioner is authorized to charge any fee or credit any overpayment to deposit account 04-0838. If any fee is due for consideration of the information disclosure statement, please charge deposit account 04-0838.

Respectfully submitted,

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